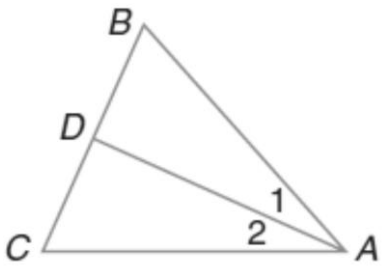
Name: _____

Bisectors of Triangles

In △ *ABC*, *AD* bisects ∠*BAC*.

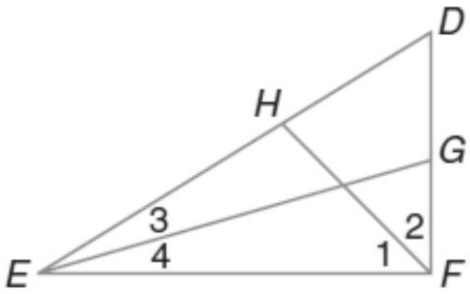


1) If $m\angle 1 = 32$, find $m\angle 2$.

2) Find $m\angle 1$ if $m\angle BAC = 52$.

3) What is $m\angle CAB$ if $m\angle 1 = 28$?

In △ *DEF*, *EG* bisects ∠*DEF*, and *FH* bisects ∠*EFD*.

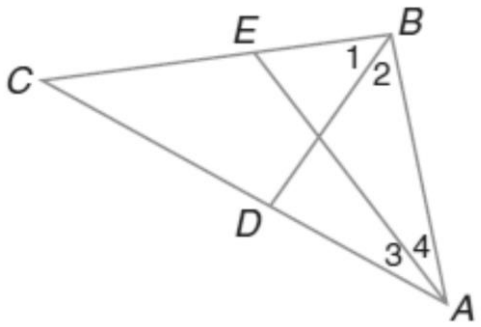


4) If $m\angle 4 = 24$, what is $m\angle DEF$?

5) Find $m\angle 2$ if $m\angle 1 = 36$.

6) What is $m\angle EFD$ if $m\angle 1 = 42$?

In $\triangle ABC$, BD bisects $\angle ABC$, and AE bisects $\angle BAC$.



7) If $m\angle 1 = 55$, what is $m\angle ABC$?

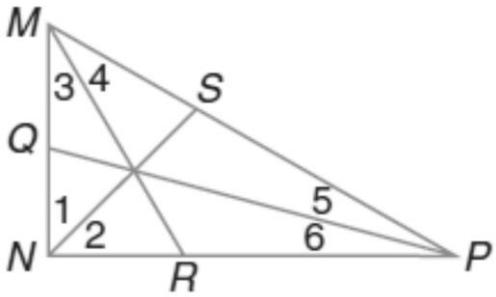
8) Find $m\angle 3$ if $m\angle BAC = 38$.

9) What is $m\angle 4$ if $m\angle 3 = 22$?

10) Find $m\angle 2$ if $m\angle ABC = 118$.

11) What is $m\angle BAC$ if $m\angle 3 = 20$?

In $\triangle MNP$, NS bisects $\angle MNP$, MR bisects $\angle NMP$, and PQ bisects $\angle MPN$.



12) Find $m\angle 4$ if $m\angle 3 = 31$.

13) If $m\angle MPN = 34$, what is $m\angle 6$?

14) What is $m\angle 3$ if $m\angle NMP = 64$?

15) Find $m\angle MNP$ if $m\angle 1 = 44$.

16) What is $m\angle 2$ if $\angle MNP$ is a right angle?